Telex®

Electret Microphone

Model SB65ELE

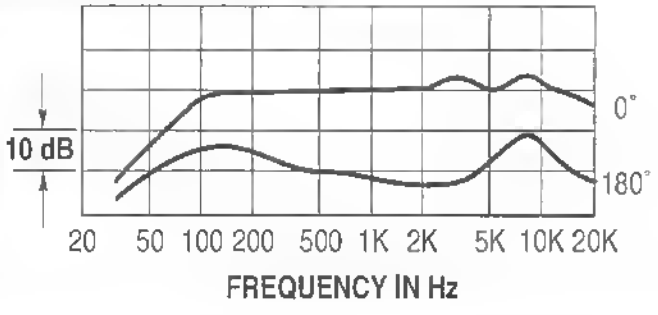
Description

If your objective is the highest frequency response with the lowest sound coloration, and you are also concerned about reducing background effects such as crowd noise or room reverberation, the SB65ELE Unidirectional Condenser Microphone is the right microphone for the job. This extremely rugged microphone is suitable for all types of vocal and instrumental miking. The SB65ELE requires phantom power (supplied by most mixers and PA amplifiers).

Features

- Very wide frequency response with low distortion for the most accurate sound reproduction.
- Compensated to minimize sound coloration (proximity effect) when used for close miking.
- Cardioid polar pattern provides uniform rejection of off-axis noise.
- High output level with very low noise.
- Tolerates a wide range of phantom power sources (see specifications).
- Tolerates very rough handling, and may be used over a wide temperature/humidity range.
- Noiseless mic on/off switch.
- Very low susceptibility to RF interference.

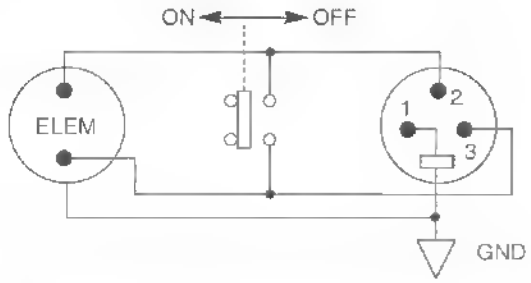
Frequency Response



Specifications

Transducer Type	Electret Condenser
Directional Pattern	Cardioid
Frequency Response	30 to 20,000 Hz
Impedance	Low (150 to 250 ohms)
Output Level at 1 kHz	
Open Circuit:	-75 dB (0 dB = 1 V/µbar)
Power Level:	-54 dB (0 dB = 1 mW/10 µbars)
EIA Sensitivity:	-147 dB
Discrimination	Typically 20 dB
Maximum Sound Pressure Level	140 dB
Supply Voltage	+9 to 52 Vdc
Mic Switch	Line shorting
Materials	
Case:	Die-cast zinc alloy
Head:	Machined brass
Finish	Electrostatic powder coat
Color	Matte gray
Weight	403 g (14.3 oz)

Wiring Diagram



Application Information

Connections

Use a three-pin XLR-type audio cable. Connect the microphone to any low-impedance (LOW Z) microphone input that supplies phantom power.

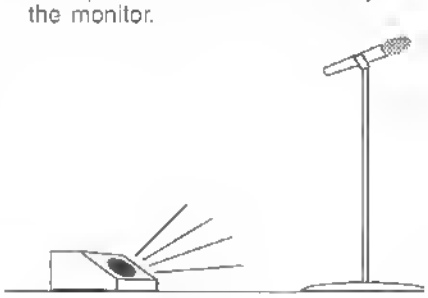
Windscreen

The SB65ELE features a built-in windscreen. However, for adverse conditions, such as outdoor use or close-up vocals, an accessory windscreen is highly recommended. See your microphone dealer or Telex.

General Notes on Microphone Placement and Usage

Good microphone placement is an art in itself, and much of what the artists wishes to achieve can only be accomplished through experimentation. A detailed discussion of microphone placement is beyond the scope of these instructions; however, the following basic considerations will almost always apply:

1. Distance to sound source: Every doubling of distance from microphone to sound source decreases the sound pressure level by a factor of four, leading to a poorer signal-to-noise ratio. Keep the microphone as close to the sound source as possible.
2. "Live" vs "canned" sound: Moving the microphone away from the sound source increases the effect of room acoustics for a "live" sound; close miking reduces the "live" effect.
3. Close miking of vocalists: When using microphones close-up, position the mic somewhat below the mouth to avoid popping and over emphasis of sibilants. You do not have to talk or sing directly into the head of a microphone! With a little experimentation and listening, your ear will tell you when the sound your getting from the microphone is right. A windscreen is highly recommended for close-up vocal miking.
4. Proximity effect: Many directional microphones can have an increased low frequency response when used at close range. This is known as proximity effect, and it can result in an undesirable boominess. The SB65ELE is compensated to produce a flat response at close range, thus eliminating the undesirable aspects of proximity effect. The performer should not notice significant change in tone color when varying the distance of the microphone.
5. Using multiple microphones for individual performers: a general rule is the distance between microphones should be at least three times the distance between individual performers and their microphones. Also very importantly, make sure all your microphone cables are wired the same to keep the microphones from canceling each other.
6. Microphone angle with respect to sound source: Generally, the head of a cardioid microphone like the SB65ELE should be pointed toward the sound source and away from sounds that should be rejected.
7. Mic position with respect to reverberant sources (walls, floors, ceilings etc.): Feedback is not the only problem that can result from room reverberations. Sometimes sound reflections can actually reduce or deaden the sound at the microphone. Be aware of the way the sound source will be reflected from objects in the environment, and place microphones to minimize the effect.
8. Placement with respect to speakers: The notes regarding reverberant sound sources also apply to speakers. A special case is the stage monitor; To minimize feedback when using cardioid microphones with a stage monitor, position the monitor and microphone as shown below. Note that the best position for the monitor is usually directly in front of the performer. In this position the microphone element faces away from the monitor.



Ordering Information

Description	Order Number
Model SB65ELE Unidirectional Condenser Microphone	300086-165
Model WS-1 Windscreen	590145-000
Replacement Stand Adapter	590109-000
Model ME-25, 25 ft (7.6 m) cable, male-female XLR-3	96150-000
Model ME-50, 50 ft (15.2 m) cable, male-female XLR-3	96150-001
Model ME-100, 100 ft (30.4 m) cable, male-female XLR-3	96150-002

TELEX®

TELEX COMMUNICATIONS, INC. 9600 Aldrich Ave. So., Minneapolis, MN 55420 U.S.A.
Telephone 612-887-5550, 884-4051
For FAX communications: USA 612-884-0043, Canada 416-431-4588, Singapore 65-746-1206, England 44-908-694020

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